

CLAIMS

1 1. A method for operating a radio reception system that includes a plurality of receivers
2 assigned to a common output device, in which one of the receivers is always designated as an
3 audio receiver and is tuned to a frequency of a radio transmitter and outputs a signal received from
4 the transmitter to the output device, and another of the receivers is designated as a search receiver,
5 said method comprising:

6 stepping the search receiver through its frequency band for a frequency signal value
57 associated with the same transmitter and determining a measure of the signal strength of said
58 frequency signal value;

59 comparing the signal strength of the signal received by the search receiver and the signal
60 strength of the signal received by the audio receiver;

61 tuning the audio receiver to said frequency signal value if the measure of the signal strength
62 of said frequency signal value is better than the measure of the signal strength associated with the
63 current signal received by the audio receiver; and

64 repeating said steps of stepping, comparing and tuning.

1 2. The method of claim 1, wherein said step of comparing includes computing the difference
2 between the field strengths, providing a difference signal value indicative thereof, and comparing
3 said difference signal value to a threshold value.

1 3. The method of claim 2, wherein said threshold value is a fixed threshold value.

1 4. The method of claim 3, wherein said threshold value is a set relative to the quality of a
2 frequency found by the search receiver.

1 5. The method of claim 2, wherein said step of tuning includes transmitting the frequency
2 found by the search receiver to the audio receiver, and tuning the audio receiver to this frequency.

1 6. A motor vehicle radio reception system, comprising:

2 a first receiver that is tuned to receive a signal from a certain transmitter and provide a
3 received signal indicative thereof and a first quality signal indicative of signal strength of said
4 received signal;

5 a second receiver that is automatically scanned through its associated reception range to
6 identify a frequency signal value associated with the transmitter and provide a second quality
7 signal indicative of signal strength of a signal associated with said frequency signal value;

8 wherein said first receiver compares said first quality signal and said second quality signal,
9 and tunes to said frequency signal value if said second quality signal indicates a better signal
10 quality than said first quality signal.

1 7. The motor vehicle radio reception system of claim 6, comprising a bus to which said first
2 and second receivers are connected and over which said first and second receivers communicate.

1 8. The motor vehicle radio reception system of claim 7, comprising an audio processing unit
2 coupled to said first receiver to receive said received signal and provide an output signal indicative
3 thereof.

1 9. The motor vehicle radio reception system of claim 8, comprising a controller that provides

2 command signals to said first receiver and to said audio processing unit.

1 10. The motor vehicle radio reception system of claim 9, wherein said audio processing unit
2 includes a microprocessor.

1 11. The motor vehicle radio reception system of claim 9, wherein said first receiver and said
2 second receiver each include their own uniquely associated antenna.

1 12. The motor vehicle radio reception system of claim 7, wherein said second receiver receives
2 an identification signal over said bus indicative of the transmitter.

1 13. The motor vehicle radio reception system of claim 7, wherein said bus comprises a MOST
2 bus.

1 14. The motor vehicle radio reception system of claim 12, wherein said first receiver transmits
2 said identification signal onto said bus.